

## CLAIMS

What is claimed is:

1 *Sub 1*

An apparatus, comprising:

- 2 a) an output packet organizer having a first and a plurality of second  
3 locations, said first and second locations corresponding to the priority  
4 of a packet, said first location having higher priority than said second  
5 locations;  
6 b) said first location coupled to a scheduler that serves said first  
7 location; and  
8 c) said second locations coupled to said scheduler through a round  
9 robin pointer.

- 1 2. The apparatus of claim 1 further comprising a third location, said third  
2 location having a higher priority than said first location.

- 1 3. The apparatus of claim 1 further comprising a fourth location, said fourth  
2 location having a lower priority than said second location.

- 1 4. The apparatus of claim 1 further comprising a packet buffer coupled to said  
2 scheduler.

1 5. The apparatus of claim 1 further comprising a packet pipeline coupled to  
2 said first and second locations.

1 6. A method, comprising:

2 a) serving packet identifiers from a first location, said first location  
3 having a first priority;

4 b) serving packet identifiers from a first second location indicated by a  
5 round robin pointer, said second location having a second priority,  
6 said first priority higher than said second priority;

7 c) incrementing said round robin pointer;

8 d) serving packet identifiers from said first location;

9 e) serving packet identifiers from a second second location indicated by  
10 said round robin pointer.

1 7. The method of claim 6 further comprising configuring said first location for  
2 a first percentage of said scheduler's resources.

1 8. The method of claim 6 further comprising configuring a plurality of second  
2 locations for a percentage of said scheduler's resources.

1 9. The method of claim 6 further comprising consuming a percentage of said  
2 first second location's servicing with packet identifiers from said first

3 location if said first location has packet identifiers that exceed said first  
4 location's configured for percentage of said scheduler's resources.

1 10. The method of claim 6 further comprising moving packet identifiers within  
2 said first second location into said second second location if said first second  
3 location is not fully served by said scheduler.

add A1  
add B2